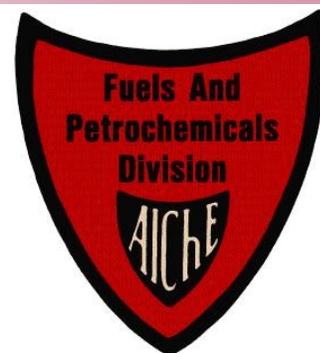


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# Flashpoint



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## The Chair's Corner

**Tim Olsen**

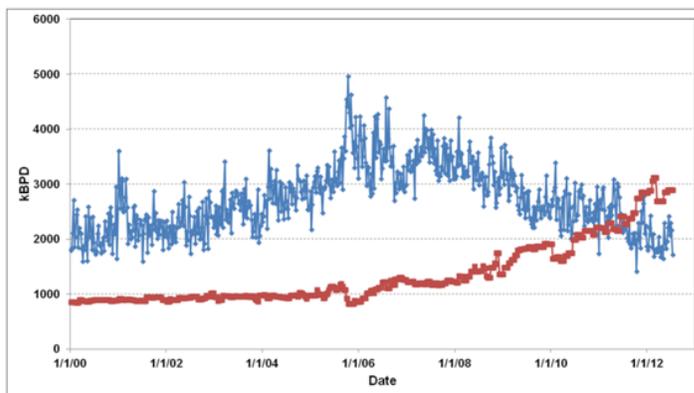


Dear Colleagues,

I am very excited about the upcoming Spring Meeting taking place again in San Antonio, April 28<sup>th</sup> – May 2<sup>nd</sup>. The Fuels & Petrochemicals Division (F&PD) will host 29 sessions within Topicals 6 & 7 and Group 16 accounting for 146 presentations. In addition, F&PD will host a Welcome Session on Monday morning along with co-sponsoring the Spring Meeting Keynote Address, hosting the Gas Utilization Luncheon Keynote on Wednesday, and having a panel forum to inform about the shale gas boom on Monday afternoon.

For Monday night, we plan to host a combined F&PD executive and awards dinner at Lüke in San Antonio, Texas, at 125 East Houston Street on Monday, April 29, with a reception starting at 6:00 PM and the dinner beginning at 7:00 PM. Note, this is a ticketed event. F&PD will honor our two award recipients, Shariq Yosufzai from Chevron and Syamal Poddar from Poddar Associates. Shariq will present on "Advancing Technologies for America's Transportation Future".

An interesting trend recently occurred in the industry; U.S. products (liquid fuels and other petroleum) exports now exceed imports (Source: DOE EIA data). When demand is down in one region, opportunities arise to find consumers in other markets where production and distribution costs make this economically attractive. Basically, this means that refiners with lower operating costs can look for additional opportunity markets beyond their own regional markets as shown with the U.S. now exporting more products than imported.



I would like to thank the F&PD members that supported improvement initiatives during my term as chair. It has been a great opportunity to work with peers not only from the industry, but academic and government. Thank-you for your efforts.

I look forward to seeing you in San Antonio at the Spring Meeting this April.

*Tim Olsen*

## Fuels and Petrochemicals Programming Update



2013 AICHE Spring Meeting & 9th Global Congress on Process Safety  
Grand Hyatt San Antonio & Henry B. Gonzalez Convention Center • San Antonio, TX  
April 28 – May 2, 2013

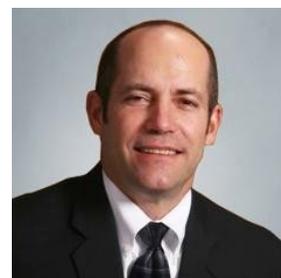
The Fuels and Petrochemicals Division (F&PD) is looking forward to another set of AICHE Annual and Spring Meetings. Please join us to learn more about recent advances and future challenges in the energy, fuels and petrochemicals industries.

F&PD will have a very rich program covering the areas in Gas Utilization, Refinery Processing, Alternative Fuels and New Technologies, and Petrochemicals and Derivatives. Sessions offered under each topic include but are not limited to are refinery operations and reliability, advances in plant simulation and design, CFD applications in refining, process control and optimization, energy conservation, advances in hydroprocessing, hydrocracking, petrochemicals and aromatics processing, biofuels and biocatalysis, fuels and chemicals from Fischer-Tropsch products, gas conversion, gasification and gas clean-up technologies, CO<sub>2</sub> con-

version, processing and sequestration, LNG, professional licensure, sulfur management, advanced technologies to reduce atmospheric emissions, tutorials for young professionals on utilities, water and offsites. The Spring Meeting continues to have an industrial focus and a large audience is anticipated again. This is a very good opportunity to learn more about industries and their challenges.

### Featured Speakers

The Spring Meeting will open with a conference-wide keynote address on the morning of April 28, given by Aamir Farid, Vice President of Manufacturing for Shell.



Following the conference-wide keynote, F&PD programming will open with a welcome session featuring a keynote speech by Dan Romasko, Executive Vice President of Tesoro and a panel session on shale oil and gas (box). Mr. Romasko's responsibilities include co-creation of the corporate strategy. As the principal operating officer, he oversees Tesoro's refining, marketing, logistics and marine functions, providing leadership that promotes the safe, compliant and profitable strategy execution.

In addition, there will be an F&PD dinner on Monday, and Gas Utilization Luncheon speech by Yu-Nan Liu, Technical Director of LNG at Air Products on Tuesday, April 30.

A complete list of all sessions and topics can be found on-line at <https://aiche.confex.com/aiche/s13/webprogram/16.html>.

**Belma Demirel**

*Programming Chair Fuels & Petrochemicals Division*

### Panel Discussion Shale Oil & Gas

Topical 6: 13<sup>th</sup> Topical Conference on Gas Utilization is sponsoring a panel discussion on Oil Shale and Gas on Monday, April 29, 2013 at 1:30 PM in the Crockett Room C+D at the Grand Hyatt hotel in San Antonio. The panel members will represent various segments of the Shale Oil and Gas industry and will engage in a Q & A session with members of the audience. Additional details for the Panel discussion will be posted on the AICHE web site [www.AICHE.org/spring](http://www.AICHE.org/spring) and the Fuels and Petrochemicals web site; [www.aiche-fpd.org](http://www.aiche-fpd.org). The Shale Oil & Gas Panel Discussion is Co-Sponsored by: *Fuels and Petrochemicals Division (16), Environmental Division (09)*.

### Call for Papers Now Open

The Call for Papers for the AICHE 2013

Annual Meeting will be open until May 13, 2013. The main focus of the F&PD at the 2013 AICHE Annual Meeting is to cover recent advances in alternative fuels and new energy technologies: conversion and processing of fossil and renewable feedstocks to chemicals and fuels, advances in



pyrolysis of fossil fuels and biomass, upgrading products from related feedstocks, and recent advances in process technologies. We look forward to your contribution:

<https://aiche.confex.com/aiche/2013/webprogrampreliminary/16.html>.

## *Ethylene Producers' Conference to Celebrate 25th Year in 2013*

*Do you remember 1989?* George H. W. Bush was inaugurated President. The top movie was "Batman" and the top TV show was "The Cosby Show." Nike's "Just Do It" campaign had recently been introduced.

More importantly for us, perhaps taking to heart the Nike slogan, 1989 was also the year of the founding of the Ethylene Producers' Conference (EPC), sponsored under the AIChE Fuels and Petrochemicals Division. The EPC has since become a significant part of the AIChE Spring Meeting, and will celebrate its 25<sup>th</sup> year when the latest incarnation convenes 29 April – 2 May 2013 in San Antonio, TX.

Similar to today's growth spurred by low-cost shale gas ethane, 1989 was a time of significant growth in the petrochemical industry. The founders of the EPC considered it an opportune time to organize a forum to distribute information regarding the production of ethylene, which led to the organization of the Ethylene Producers' Committee and the first Ethylene Producers' Conference. Originally the conference included papers pertaining to the safety and technology aspects of ethylene production, but it has now grown to also include sessions covering other aspects of ethylene production such as environmental, operations, feed stocks, controls, maintenance and rotating equipment. The Ethylene Producers' Committee currently has twenty-two members from operating companies and olefins technology providers and the 2013 EPC will consist of thirteen paper sessions, three of which will include panels or roundtables.

The advent of shale gas in North America has led to an unexpected wave of opportunity for many, including not only ethylene producers, but also companies interested in producing ammonia, LNG and others. This year's AIChE Spring Meeting will provide attendees an invaluable opportunity to learn about developments on these fronts, as well as other developments in the field of chemical engineering. The Ethylene Producers' Conference will, as usual, focus on all aspects of olefins production. It is as relevant today as it was 25 years ago. I hope you join us in the Fuel & Petrochemicals Division, and specifically the Ethylene Producers' Committee, for the 2013 conference in San Antonio.

**Michael J. Tallman**

*Director Fuels & Petrochemicals Division and  
Vice-Chair Ethylene Producers Committee*

## **Inspiring Future Engineers High School Outreach Program Held In Chicago**

Approximately 70 students from local area high schools attended a High School Outreach Program on Tuesday, November 13, 2012 at Harper College in Schaumburg, IL. The intent of the program was to expose students to the profession of chemical engineering and engineering in general, and to encourage the students to study math and science. The students also had the opportunity to interact with professional engineers.

The keynote speaker for the event was former NASA Astronaut Al Sacco, the first chemical engineering professor in outer space. Dr. Sacco wowed the kids with his exploits during his two Space Shuttle missions. The event also included a panel discussion with experienced engineers and a box lunch for kids and participants. The High School Outreach Program was sponsored by the AIChE and by UOP, a Honeywell Company.



From left to right: Rick Isherwood, future engineer, TBD, Kristine Chin, Meagan Lewis, Al Sacco, Dennis O'Brien. These folks have all supported the outreach program over the years.

**Rick Isherwood**

*Second Vice Chair Fuels & Petrochemicals Division*

## Join Us in Galveston in October at the 5<sup>th</sup> AIChE Southwest Process Technology Conference

Now entering its fifth year, the South Texas Section of the AIChE, in partnership with AIChE HQ, is once again hosting the Southwest Process Technology Conference (SPTC) at the Moody Gardens Hotel in Galveston, October 3 & 4, 2013. The conference provides technical sessions and industry solutions in process technology, which attract hundreds of chemical engineers from the Greater Houston and Gulf Coast region.

The attendance at the previous conferences has been up to 400. This year's conference promises to draw an even larger audience as we present our expanded technical program and popular keynote speaker Lynne Lachenmeyer, ExxonMobil Chemicals' Senior Vice President. So save the date – October 3 & 4 – and make sure you join us in Galveston; if there's a paper you'd like to present let us know by sending an email to [sptc13@aiiche.org](mailto:sptc13@aiiche.org). This year we are also integrating some programming activities for chemical engineering students in the south Texas region followed by a career fair for students.

### Support the conference through sponsorship

The conference also provides an opportunity to reach out to hundreds of chemical engineers working in the Ship Channel, Baytown, Pasadena, Texas City, Chocolate Bayou and Freeport by becoming a Platinum, Gold, Silver or Bronze sponsor, an exhibitor, or an advertiser in the conference program book. Early bird sponsorships and exhibition slots are available at significant discounts, with payment due by April 30, 2013. Don't miss this opportunity to reach out to the largest concentration of chemical engineers in the United States. Reserve your spot now!

More information about the conference can be found out on the AIChE website at <http://www.aiiche.org/conferences/regional-process-technology-conference/2013>, and if you have any questions, email us at [sptc13@aiiche.org](mailto:sptc13@aiiche.org)



### Preliminary Program

#### **Thursday, October 3:**

Opening Keynote

#### **Morning Sessions**

Track 1: Energy Efficiency

Track 2: Catalysis & Reaction Engineering

Track 3: Thermodynamics & Process Simulation

#### **Afternoon Sessions:**

Track 1: Process Safety

Track 2: Distillation/Separation

Track 3: Upstream Oil & Gas

#### **Evening:**

STS-AIChE Dinner Meeting

#### **Friday, October 4:**

#### **Morning Sessions:**

Track 1: Process Control and Optimization

Track 2: Chemical Process Technology

Track 3: Student Program & Career Fair

#### **Afternoon Sessions:**

Track 1: Petroleum Refining Technology

Track 2: Process Development/ Chem Manufacturing

Track 3: Technical Session for Young Professionals

#### **Evening:**

Social Mixer

**Jayce Matthews**

*Webmaster and Director Fuels & Petrochemicals Division  
and SPTC Program Chair*

## Announcing the Harry West Award Scholarship Winners!

The Harry West Award Scholarship is an award where F&PD provides scholarship cash rewards for undergraduate students who are working in the areas of fuels, petrochemicals, and safety. Papers are not limited to only research, but also can include design case studies and reviews in these areas.

This year the F&PD Executive Committee decided to try a new approach to this award by utilizing the Student Poster Competition at the AIChE Student Conference that was in Pittsburgh, PA. F&PD would like to acknowledge all students for their hard work and efforts. Several excellent posters were identified and the judges had a difficult time identifying only three winners. The three awards that were identified were:

**Morgan Bakies, University of Illinois** — C4 Biofuel and High Value Biochemical Production Using Metabolically Engineered *Clostridia*

**Jess Earl, University of Utah** — Characterization of Pilot Scale Pressurized Fluidized Bed Biomass Gasification Products Using Gas Chromatography Techniques

**Ana McClang, West Virginia University** — Performance of Direct Carbon Fuel Cells Using Bioderived Fuels”

It should be noted that although Morgan Bakies is currently attending the University of Illinois, the research for poster was performed at the University of Alabama.

Many thanks go to Cliff Henderson from Georgia Tech University at the Student Poster Competition for his support and allowing F&PD the ability to work with the competition at the Annual Meeting. Thanks to Ian Glasgow, Richard Isherwood, Michael Tallman, and Steve Coleman for their support in being judges. And finally many, many thanks to Peyton Richmond for his dedicated effort to identify an excellent opportunity for F&PD to award students for their hard work in the areas that F&PD service.

F&PD believes this was a great change for the Harry West Award, and is planning to use the AIChE Student Conference in some capacity for next year's Harry West Award. It is our hope that this will be the first of several years that F&PD demonstrates its support to undergraduate students work in the areas of fuels, petrochemicals, and safety at the AIChE Student Conference.



## Congratulations to the Newly Elected F&PD Officers

The AIChE Fuels & Petrochemicals Division would like to welcome our newest elected officers from the January 2013 election.



### Second Vice-Chair

Dennis O'Brien (Jacobs Consultancy)

### Treasurer

Steve Coleman (LyondellBasell)

### Director

3-yr, Mark Darby (CMiD Solutions)

### Director

3-yr, Richard Kolodziej (Mustang Engineering)

### Director

3-yr, Saadet Ulas Acikgoz (UOP)

## Calendar of Events

### 2013 AIChE Spring Meeting &

### 9<sup>th</sup> Global Congress on Process Safety

Grand Hyatt \* San Antonio, TX, April 28—May 2, 2013

### Industrial Water Use and Reuse Workshop

Grand Hyatt \* San Antonio, TX, May 1-2, 2013

### Process Development Symposium

Process Scale-Up and its Challenges \* The Hyatt Lodge at McDonald's Campus \* Oak Brook, IL \* June 11-13, 2013

### 5<sup>th</sup> Latin American Conference on Process Safety

Hilton \* Cartagena de Indias, Colombia \* Aug 12-14, 2013

### 5<sup>th</sup> AIChE Southwest Process Technology Conference

Moody Gardens Hotel and Convention Center \* Galveston, TX \* October 3-4, 2013

### 2013 AIChE Annual Meeting

Hilton San Francisco Union Square \* November 3-8, 2013



## Fuels and Petrochemicals Division 2012-2013 Executive Committee

**CHAIR:****Tim Olsen**

Emerson Process Management

Email: [chair@aiiche-fpd.org](mailto:chair@aiiche-fpd.org)**TREASURER:****Steve Coleman**

LyondellBasell

Email: [treasurer@aiiche-fpd.org](mailto:treasurer@aiiche-fpd.org)**COMMUNICATIONS DIRECTOR:****Kristine Chin**

AIChE

Email: [communications@aiiche-fpd.org](mailto:communications@aiiche-fpd.org)**FIRST VICE CHAIR:****Lori McDowell**

Matheson Gas

Email: [vicechair@aiiche-fpd.org](mailto:vicechair@aiiche-fpd.org)**SECRETARY:****Virginia Brown**

Fluor

Email: [secretary@aiiche-fpd.org](mailto:secretary@aiiche-fpd.org)**R&D TECHNOLOGY LIAISON:****Galen Suppes**

The University of Missouri

Email: [randliaison@aiiche-fpd.org](mailto:randliaison@aiiche-fpd.org)**SECOND VICE CHAIR:****Rick Isherwood**

UOP

Email: [secondvicechair@aiiche-fpd.org](mailto:secondvicechair@aiiche-fpd.org)**COUNCIL (CTOC) LIAISON:****Bond Calloway**

Savannah River National Laboratory

Email: [ctocliaison@aiiche-fpd.org](mailto:ctocliaison@aiiche-fpd.org)**AICHE STAFF LIAISON:****Lauren Deitch**

AIChE

Email: [laurd@aiiche.org](mailto:laurd@aiiche.org)**PAST CHAIR:****Colin Bowen**

Consultant

Email: [pastchair@aiiche-fpd.org](mailto:pastchair@aiiche-fpd.org)**WEBMASTER:****Jayce Mathews**

KBR

Email: [info@aiiche-fpd.org](mailto:info@aiiche-fpd.org)**PROGRAMMING CHAIR:****Belma Demirel**

Praxair

Email: [programming@aiiche-fpd.org](mailto:programming@aiiche-fpd.org)**NEWSLETTER EDITOR:****Kristine Chin**

AIChE

Email: [newsletter@aiiche-fpd.org](mailto:newsletter@aiiche-fpd.org)

For individual programming directors,  
please see the website—[www.aiiche.fpd.org](http://www.aiiche.fpd.org)

**2010-2013 DIRECTORS**

Robert Schmidt  
Honeywell Company

Email: [director@aiiche-fpd.org](mailto:director@aiiche-fpd.org)

Jayce Mathews  
KBR

Email: [director@aiiche-fpd.org](mailto:director@aiiche-fpd.org)

Ahmed Khogeer  
Saudi Aramco

Email: [director@aiiche-fpd.org](mailto:director@aiiche-fpd.org)**2011-2014 DIRECTORS**

Belma Demirel  
Praxair

Email: [director@aiiche-fpd.org](mailto:director@aiiche-fpd.org)

Nazmul Karim  
Texas Tech

Email: [director@aiiche-fpd.org](mailto:director@aiiche-fpd.org)

Peyton Richmond  
Lamar University

Email: [director@aiiche-fpd.org](mailto:director@aiiche-fpd.org)**2012-2015 DIRECTORS**

Bill Rooney  
UOP

Email: [director@aiiche-fpd.org](mailto:director@aiiche-fpd.org)

Michael Tallman  
KBR

Email: [director@aiiche-fpd.org](mailto:director@aiiche-fpd.org)

Ian Glasgow  
Mustang Engineering

Email: [director@aiiche-fpd.org](mailto:director@aiiche-fpd.org)